



Sustainable Biomass Partnership

Supply Base Report: RENTECH Wawa Facility RTK WP Canada, ULC

www.sustainablebiomasspartnership.org



Completed in accordance with the Supply Base Report Template Version 1.1

*For further information on the SBP Framework and to view the full set of documentation see
www.sustainablebiomasspartnership.org*

Document history

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Contents

1	Overview	1
2	Description of the Supply Base	2
2.1	General description	2
2.2	Actions taken to promote certification amongst feedstock supplier	7
2.3	Final harvest sampling programme	7
2.4	Flow diagram of feedstock inputs showing feedstock type	7
2.5	Quantification of the Supply Base	8
3	Requirement for a Supply Base Evaluation.....	10
4	Supply Base Evaluation	11
4.1	Scope	11
4.2	Not applicable Justification.....	11
4.3	Not applicable Results of Risk Assessment.....	11
4.4	Results of Supplier Verification Programme	11
4.5	Conclusion	11
5	Supply Base Evaluation Process	12
6	Stakeholder Consultation.....	13
6.1	Response to stakeholder comments	13
7	Overview of Initial Assessment of Risk	14
8	Supplier Verification Programme	15
8.1	Description of the Supplier Verification Programme	15
8.2	Site visits	15
8.3	Conclusions from the Supplier Verification Programme.....	15
9	Mitigation Measures.....	16
9.1	Mitigation measures	16
9.2	Monitoring and outcomes	16
10	Detailed Findings for Indicators	17
11	Review of Report.....	18
11.1	Peer review	18
11.2	Public or additional reviews.....	18
12	Approval of Report.....	19
13	Updates	20

13.1	Significant changes in the Supply Base	20
13.2	Effectiveness of previous mitigation measures	20
13.3	New risk ratings and mitigation measures	20
13.4	Actual figures for feedstock over the previous 12 months	20
13.5	Projected figures for feedstock over the next 12 months	20

1 Overview

Producer name: **RTK WP Canada, ULC dba Rentech**

Producer location: Mill Road, Hwy 101 East
Limer, Ontario, Canada
Canada P0T1C0

Head Office:
981 Balmoral St., Suite 101
Thunder Bay, ON,
Canada P7B 0A6

Geographic position: 47° 58' 14.2644" N 84° 31' 57.4824" W

Primary contact: Pierre-Olivier Morency, RPF
981 Balmoral St., Suite 101, Thunder Bay, ON, Canada P7B 0A6
(418) 554-1101, pmorency@rentk.com

Company website: www.rentechinc.com

Date report finalised: 15/Jul/2016

Close of last CB audit: 17/Jun/2016

Name of CB: PricewaterhouseCoopers LLP

Translations from English: No

SBP Standard(s) used: Standard 2 version 1.0; Standard 4 version 1.0; Standard 5 version 1.0

Weblink to Standard(s) used: <https://sbp-cert.org/documents/standards-documents/standards>

SBP Endorsed Regional Risk Assessment: Not applicable

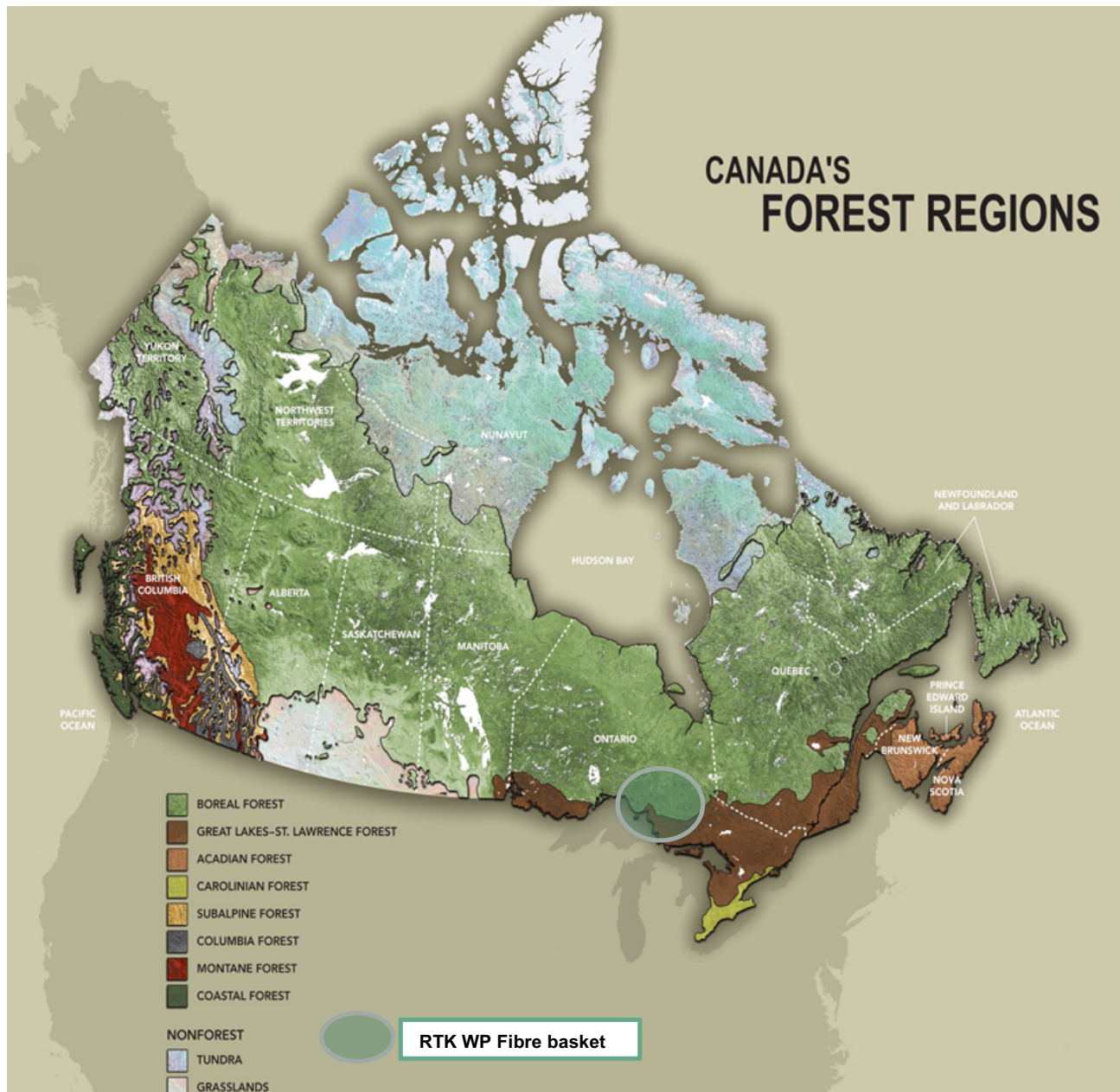
Weblink to SBR on Company website: www.rentechinc.com

Main (Initial) Evaluation	First Surveillance	Second Surveillance	Third Surveillance	Fourth Surveillance
X	☐	☐	☐	☐

2 Description of the Supply Base

2.1 General description

Rentech (RTK WP Canada, ULC) sources fibre within the province of Ontario, Canada and especially within the Canadian Boreal Forest and Great Lakes/St. Lawrence Forest Regions. The supply area is highlighted on the following map:



Source: <http://www.sfmcanada.org/en/canada-s-forests>

Boreal

(Source: <http://www.sfmcanada.org/en/canada-s-forests>)

"Canada shares 30% of the global boreal forest. The Canadian portion of the boreal region stretches from the Yukon and northeastern British Columbia across the northern parts of the Prairie Provinces, Quebec and Ontario to Labrador and Newfoundland. It forms a band of more than 1000 kilometres wide. This area is primarily publicly owned and is rich in natural resources. Encircling the earth's Northern Hemisphere just south of the Arctic Circle, this green mantle of mainly coniferous forest comprises about 16.6 million square kilometres, or roughly one-third of the planet's forested area."

Great Lakes/St. Lawrence

(Source: <http://www.sfmcanada.org/en/canada-s-forests>)

"Among Canada's forest regions, the Great Lakes/St Lawrence area is second in size only to the boreal, covering southeastern Manitoba to the Gaspé Peninsula in Quebec. Trees in this region are a mix of coniferous and deciduous, with species such as the red pine, eastern white pine, yellow birch and eastern hemlock. Many boreal species may also be found here, in addition to beech, red oak, basswood, eastern white cedar, white elm and largetooth aspen."

In 2015, 128,251.02 Green Metric tonnes (GMT) of fibre was supplied to Rentech's Wawa facility located in Limer, Ontario, Canada. It is anticipated that the facility will require up to 900,000 GMT of fibre annually when it operates at full capacity. In comparison, other forest consumers (sawmills, OSB mills, and pulp / paper mills) within the region require from 50,000 to 1,500,000 GMT of fibre annually. The Rentech Wawa Pellet Plant currently supports about 40 full time jobs, and a further 165 jobs in the harvest and delivery of the required fibre supply.

Table 1 - Overview of Rentech-Wawa fibre supply

Biomass Feedstock types	Tonnage (data in metric tonnes as received) - 2015	SBP feedstock product groups	Number of suppliers	Species mix	Certification status
Branches, tops and bark	58,976.14 GMT	SBP-compliant Primary Feedstock	2	Refer to list below	100% certified
Branches, tops and bark	1,721.96 GMT	SBP-controlled Primary Feedstock	1	Refer to list below	0% certified
Long rotation (broadleaf)	42,947.91 GMT	SBP-compliant Primary Feedstock	1	Refer to list below	100% certified
Long rotation (broadleaf)	4,260.75 GMT	SBP-controlled Primary Feedstock	5	Refer to list below	0% certified
Long rotation (conifer)	10,685.53 GMT	SBP-compliant Primary Feedstock	1	Refer to list below	100% certified
Long rotation (conifer)	719.08 GMT	SBP-controlled Primary Feedstock	2	Refer to list below	0% certified
Saw dust and bark processing residue	6,632.02 GMT	SBP-controlled Secondary Feedstock	3	Refer to list below	0% certified
Total	128,251.02 GMT				

approved harvest blocks identified in the Annual Work Schedules required by the Forest Management Plans of the Sustainable Forest Licenses in the table below.

Rentech's Wawa Facility is currently supplied from Forests in Ontario North East Region from Crown and Private Land contained within:

Table 2 - Forest Management Unit

Forests	Total Area (hectares)	Total Crown (hectares)	Total Patent (hectares)	Certification type
Algoma Forest	1,570,776	972,353	568,087	FSC
Martel Forest	1,191,274	1,139,373	40,294	FSC
White River Forest	612,567.4	611,379.2	1,074.3	FSC
Nagagami Forest	448,389.1	447,514.4	869.5	N/A
North Shore Forest	1,250,487	1,075,685	133,417	FSC
Magpie Forest	440,538	391,978	46,455	N/A
Big Pic Forest	657,148.3	651,784.3	5,364	FSC
Romeo Malette Forest	629,878	605,280	18,651	FSC
Total	6,801,057.8	5,895,346.9	814,211.8	

Sources:

<http://www.efmp.lrc.gov.on.ca/eFMP/home.do>

<https://www.ontario.ca/page/crown-patents>

<https://www.ontario.ca/document/forest-certification>

Private Land

In addition to crown sources in Ontario, primary fibre is sourced from private land within the province. The land size ranges from 2 hectares to 10,000 hectares.

Private land owners must comply with all legal requirements including the Forestry Act (http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_90f26_e.htm) and the Municipal Act (http://www.e-laws.gov.on.ca/html/statutes/english/elaws_statutes_01m25_e.htm). To encourage sustainable forest management, the Province of Ontario provides for managed forest tax incentives. Additional legislation pertains to the legality of wood and the transportation of all wood requires appropriate documentation that is monitored by the Ministry of Transportation

Wood procurement policy

Rentech has a wood procurement policy endorsed by senior management which includes a clear commitment by the company to implement its best efforts to avoid trading and sourcing wood or wood fibre from the controversial categories for controlled wood. This includes a commitment to a FSC® Chain of custody system certified for the procurement of fibre. Rentech does not procure any uncontrolled wood as per FSC®. Rentech's FSC® Certificate information is available at info.fsc.org.

The company does not procure any CITES or IUCN species in its fibre basket.

General description of the supply base – Ontario, Canada Forest overview

(Sources: <https://www.ontario.ca/page/forestry-facts> and <https://www.ontario.ca/page/forest-regions>)

Ontario covers 107,636,418 hectares (ha) in total area (266 million acres) with 87% of the Province publicly owned (93.2 million ha), including: 9.7 million ha within parks and protected areas and 83.5 million ha of other Crown managed lands. 13% of Ontario is Federal/First Nations or privately owned (14.4 million ha).

- 66% of Ontario is forested (71 million ha) - this is approximately 17% of Canada's forests and 2% of the world's forests
- 26 % of the Province is managed forest where all harvesting activities take place
- Ontario has approximately 85 billion trees
- There are over 7 billion cubic metres of growing stock (tree volume) in Ontario
- There are four broad forest regions in Ontario (Hudson Bay Lowlands, Boreal, Great Lakes-St. Lawrence, and Deciduous)
- 61% of Ontario's forests have reached full development
- 9% of Ontario's forests are within Parks and Protected areas (6.4 million ha)
- 81% of Ontario's forests are on Crown land (public forest lands 57.5 million ha)

From April 1, 2011 to March 31, 2012, 44% of Ontario's Crown forest was managed for forestry (27.8 million ha). Annually, the total forest harvest area of the Province of Ontario is approximately 114,110 hectares with a forest harvest volume of 12.6 million cubic metres (m³) only about 50 % of the total annual allowable cut (AAC). The annual forest renewal is 109,040 hectares with 43,648 hectares regenerated by artificial means (tree planting and seeding) and 65,392 hectares regenerated naturally.

Annual report on forest management 2012-2013

<https://www.ontario.ca/page/annual-report-forest-management-2012-2013>

Ontario Forest industry

(Source: <https://www.ontario.ca/page/forestry-facts>)

- Value of forestry sector (revenue from sales): \$12.9 billion (2013)
 - Pulp and paper: \$6.7 billion (2013)
 - Sawmill, engineered wood and other wood product: \$3.4 billion (2013)
 - Furniture/kitchen cabinet manufacturing: \$1.8 billion (2013)
- Industry employees: 50,900 (2014); approximately 152,700 direct and indirect jobs (2014)
- Forest product exports: \$5.2 billion (2014)
- Crown charge payments by the forest industry (2014): \$97.5 million (includes \$64.6 million in forestry trust fund payments)
- Forest Resource or Sustainable Forest Licences issued to harvest forest resources for the 2014-15 fiscal year: 3,588

General description of the supply base - Canada

(Source: <http://www.sfmcanada.org/en/canada-s-forests>)

"Canada is the second largest country in the world with forest or other wooded land making up 40% of its 979 million hectares. Canada's forest cover represents 30% of the world's boreal forest and 10% of the world's overall forest cover.

Under Canada's Constitution, the federal and provincial/territorial governments have specific roles in the management of public forest lands. The federal government is responsible for matters relating to the national economy, trade, international relations, and federal lands and parks, and has constitutional, treaty, political and legal responsibilities for Aboriginal peoples. The provincial and territorial governments have legislative authority over the conservation and management of the forest resources on Crown lands. The laws and regulations governing forest practices on provincial and territorial public lands are among the most stringent in the world."

Additional information on the social, economic and environmental status of forests and forestry in Canada can be found here:

<http://www.nrcan.gc.ca/forests/report/16496>

2.2 Actions taken to promote certification amongst feedstock supplier

The company purchases FSC® Endorsed certified fibre or FSC® Controlled Wood. All wood that is included in the company's purchases falls within the FSC® CW risk assessment and is therefore Controlled Wood; no uncontrolled wood is purchased. Compliance is ensured with individual supplier risk assessment. The company then determines if onsite inspections are necessary. As part of Rentech's sourcing processes, the company promotes the importance of sustainable forest management practices and FSC® certification through outreach programs to suppliers. Rentech requires that all fibre sold by the wood supplier to the company is not from, nor will it not be involved in:

- illegal or unauthorized logging or the trade in illegal wood or forest products;
- violation of traditional and human rights in forestry operations;
- destruction of high conservation values in forestry operations;
- significant conversion of forests to plantation or non-forest use;
- introduction of genetically modified organisms in its forestry operations; and
- violation of the ILO Core Convention as defined in the ILO Declaration on Fundamental Principles and Rights at Work.

The company distributes its best management practices (BMP's) "Operations Handbook" with its purchase wood contracts when purchasing from an uncertified forest. For certified areas, the company supports encouraging the use of best management practices provided from the SFL holder. All suppliers are also subject to the company's supplier risk assessment protocols of the FSC® controlled wood program.

The company has appropriate internal management systems to ensure that all suppliers of wood fibre are monitored for compliance. This is determined through the individual supplier risk assessment, which determines whether onsite inspections are necessary and completed. All inspections are documented and the company files all inspections with each contract. Typical management systems include wood fibre scaling systems and databases, human resource policies and procedures, health and safety programs, wood procurement programs and procedures associated with FSC® Chain of Custody certification.

2.3 Final harvest sampling programme

Rentech follows all legal requirements and follows documented procedures in the **Forest compliance handbook** <https://www.ontario.ca/document/forest-compliance-handbook>. All information is reported in the Forest Operations Information Program (FOIP) in the form of compliance monitoring and reporting.

2.4 Flow diagram of feedstock inputs showing feedstock type

Not applicable.

2.5 Quantification of the Supply Base

Supply Base

- a. Total Supply Base area (ha): cumulative area of all Forest Management Unit (7) from Table above:
6,801,057.8 hectares
- b. Tenure by type (ha):
814,211.8 ha - Privately owned
5,895,346.9 ha - Publicly owned
- c. Forest by type (ha):
Approx. 75% Boreal - 5,100,793.35 hectares
Approx. 25% Temperate – 1,700,264.45 hectares
- d. Forest by management type (ha): plantation/managed natural/natural
6,801,057.8 hectares - Managed natural and/or natural
- e. Certified forest by scheme (ha): (e.g. hectares of FSC® or PEFC-certified forest)
FSC®: 4,404,070.2 ha

Feedstock

- f. Total volume of Feedstock: tonnes or m³ - **128,251.02 Green Metric tonnes (GMT) of feedstock**
- g. Volume of primary feedstock: tonnes or m³
Branches, tops and bark: 31,356.18 GMT
Long rotation (broadleaf): 78,333.70 GMT
Long rotation (conifer): 11,404.61 GMT
- h. List percentage of primary feedstock (g), by the following categories. Subdivide by SBP-approved Forest Management Schemes:
 - Certified to an SBP-approved Forest Management Scheme: **94%**
 - Not certified to an SBP-approved Forest Management Scheme: **6%**
- i. List all species in primary feedstock, including scientific name

List of species included in Rentech supply base: Populus tremuloides (Trembling Aspen), Betula papyrifera (White Birch), Pinus banksiana (Jack Pine), Abies balsamea (Balsam Fir), Picea mariana (Black Spruce), Pinus strobus (White Pine), Pinus resinosa (Red Pine), Larix laricina (Larch) and, Picea glauca (White Spruce), Balsam Poplar (Populus balsamifera), Eastern White Cedar (Thuja , occidentalis), Larch (Larix laricina), Black Ash (Fraxinus nigra), Bur Oak (Quercus macrocarpa), Eastern Hemlock (Tsuga Canadensis), Ironwood (Ostrya virginiana), Largetooth aspen (Populus grandidentata), White ash (Fraxinus Americana), Yellow Birch (Betula alleghaniensis), Red Maple (Acer rubrum), Tamarack (Larix laricina). The company does not procure any raw materials from the list of species deemed threatened or endangered as classified by CITES.

- j. Volume of primary feedstock from primary forest
Not applicable.
- k. List percentage of primary feedstock from primary forest (j), by the following categories. Subdivide by SBP-approved Forest Management Schemes:

Not applicable.

- l. Volume of secondary feedstock: specify origin and type - the volume may be shown as a % of the figure in (f) if a compelling justification is provided

Saw dust and bark processing residue: 6,632.02 GMT

Supplier list: Local sawmills.

- m. Volume of tertiary feedstock: **N/A**

3 Requirement for a Supply Base Evaluation

SBE completed	SBE not completed
☐	X

4 Supply Base Evaluation

4.1 Scope

Not applicable.

4.2 Not applicable Justification

Not applicable.

4.3 Not applicable Results of Risk Assessment

Not applicable.

4.4 Results of Supplier Verification Programme

Not applicable.

4.5 Conclusion

Not applicable.

5 Supply Base Evaluation Process

Not applicable.

6 Stakeholder Consultation

Not applicable.

6.1 Response to stakeholder comments

Not applicable.

7 Overview of Initial Assessment of Risk

Not applicable.

8 Supplier Verification Programme

8.1 Description of the Supplier Verification Programme

Not applicable.

8.2 Site visits

Not applicable.

8.3 Conclusions from the Supplier Verification Programme

Not applicable.

9 Mitigation Measures

9.1 Mitigation measures

Not applicable.

9.2 Monitoring and outcomes

Not applicable.

10 Detailed Findings for Indicators

Not applicable.

11 Review of Report

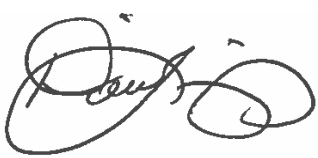
11.1 Peer review

Nate Ryant, a Registered Professional Forester (RPF) from NMR Resource Mgmt Ltd, a forest consulting company from British-Columbia, Canada peer reviewed this report on June 8, 2016.

11.2 Public or additional reviews

This report is publically available and accessible online at www.rentechinc.com.

12 Approval of Report

Approval of Supply Base Report by senior management			
Report Prepared by:	<i>Pierre-Olivier Morency</i>	<i>Commercial Manager</i>	<i>June 14, 2017</i>
	Name	Title	Date
The undersigned persons confirm that I/we are members of the organization's senior management and do hereby affirm that the contents of this evaluation report were duly acknowledged by senior management as being accurate prior to approval and finalization of the report.			
Report approved by:		<i>Director Operations Canada</i>	<i>June 14, 2017</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date
Report approved by:	<i>[name]</i>	<i>[title]</i>	<i>[date]</i>
	Name	Title	Date

13 Updates

13.1 Significant changes in the Supply Base

Not applicable.

13.2 Effectiveness of previous mitigation measures

Not applicable.

13.3 New risk ratings and mitigation measures

Not applicable.

13.4 Actual figures for feedstock over the previous 12 months

Not applicable.

13.5 Projected figures for feedstock over the next 12 months

Not applicable.